



“Psychological Determinants Of Procrastination: The Role Of Self-Efficacy And Emotion Regulation Among College Students”

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Abstract

Procrastination is a common behavioral issue that can reduce productivity, efficiency, and the overall quality of work in personal as well as in professional environments. In educational settings, procrastination among students may affect learning, class and school responsibilities, and the timely completion of academic tasks by the students. Present study was planned to focus on two important psychological variables that may influence procrastination are self-efficacy and emotion regulation. Self-efficacy refers to an individual's belief in their capability to successfully perform tasks, while emotion regulation involves the ability to manage and respond to emotional experiences effectively. A purposive sample of 100 college students was taken in present study. A correlational research design was used to examine the role of self-efficacy and emotion regulation in procrastination among college students. College Academic Self-Efficacy Scale (CASES) developed by Owen & Froman (1988), Emotion Regulation Questionnaire (ERQ) by Gross & John (2003) and Tuckman Procrastination Scale (TPS; 1991) were used in present study. Correlational results of the study shows that high level of self-efficacy and Cognitive Reappraisal are positively associated with less academic procrastination tendencies among college students. Expressive suppression positively correlated with academic procrastination behaviour among college students. Regression coefficient analysis exhibits that expressive suppression (a maladaptive emotion regulation strategy) emerged as a strong negative and self-efficacy as a positive predictor of procrastination behaviour among college students means low suppression and high self-efficacy leads to low procrastination among college students; they are less likely to delay tasks or avoid work-related duties. It highlights that self-efficacy act as a cognitive factor, while emotional regulation acts as an affective factor, and both jointly predict procrastination. Present study suggests that procrastination is best predicted and reduced by improving both self-efficacy (as a cognitive factor) and emotion regulation (affective factor) not just time management.

Keywords: Self-Efficacy, Emotion Regulation and Procrastination

Procrastination is a common issue that negatively affects productivity, academic performance, and overall health (Mushtaq, 2025). It is not only a matter of poor time management but is also influenced by psychological, behavioral, and environmental factors. This habit involves delaying or postponing tasks unnecessarily, often driven by the false belief that there is still plenty of time to complete them. As deadlines approach, individuals may experience stress and difficulty in managing their emotions (Kanwar, 2023). Procrastination is generally understood as the intentional delay in starting or completing tasks until the last possible moment or even beyond the deadline, despite having the ability to complete them earlier (Rozental & Carlbring, 2013; Steel, 2007). Such behavior can lead to reduced self-confidence, lower efficiency and productivity, and an increased likelihood of not completing tasks successfully (Ferrari, 2001).

In the academic field, this behaviour is commonly known as academic procrastination. Students who have this behaviour tend to always delay doing college assignments, work on assignments close to deadlines, and spend time on less important things. Academic procrastination is defined as “the voluntary postponement of academic work despite knowledge of the possible negative consequences attached to procrastination” (Steel, 2007).

Kim, Fernandez and Terrier (2017) distinguish between two types of procrastinators: passive and active. Passive procrastinators tend to delay tasks due to indecision and poor self-regulation, often struggling to begin their work. In contrast, active procrastinators deliberately postpone tasks but still manage to meet deadlines, often finding that pressure enhances their motivation and performance. Ferrari and Diaz-Morales (2007) offer another perspective by identifying arousal procrastinators, who delay tasks for the excitement of working at the last minute, and avoidant procrastinators, who postpone tasks to escape negative feelings. Although procrastination is common, its extent can differ across various areas of life, such as academic, work, leisure, and family settings (Steel & Klingsieck, 2016). As deadlines near, individuals who procrastinate tend to experience greater stress, poorer health, and lower academic performance compared to those who complete tasks on time. In short, emotional relief gained from delaying work is temporary while the long-term effects are more harmful. Solomon and Rothblum (1984) highlighted factors such as fear of failure, test anxiety, and low self-confidence as key cognitive reasons behind procrastination. Steel (2007) explained procrastination as a breakdown in self-regulation, occurring when individuals fail to act or struggle to start, change, or control their behaviour.

Procrastination also plays a mediating role between academic self-efficacy and both positive and negative emotions (Morin-Huapaya, Yupanqui-Lorenzo, Comina-Tamayo, Acosta-Porzoliz & Quispilaya-Capcha, 2023). More recently, Singh and Srivastava (2024) reported a relationship between procrastination and self-efficacy. Based on these findings, the present study examines how self-efficacy and emotion regulation influence procrastination among students.

Self-efficacy refers to an individual's belief in their ability to organize and carry out the actions needed to handle future situations, shaping how they think, feel, and behave (Bandura, 1997). It is an

important personal factor that influences one's sense of control and ability to bring about change in behavior. It affects how much effort a person puts into a task, how persistent they are when facing difficulties, and whether their thinking supports or hinders them when dealing with challenges in their environment.

Emotion regulation refers to the different strategies individuals use to monitor and modify the frequency, intensity, duration, and expression of their emotions, particularly in situations related to goal-directed behavior (Kring, 2010; Gross, 2015). Effective or adaptive regulation involves managing strong emotional experiences in ways that support the achievement of desired outcomes (Gratz & Roemer, 2004). In contrast, emotion dysregulation is characterized by ineffective emotional responses, including difficulties in understanding, reacting to, and managing emotions (Mennin, Holaway, Fresco, Moore & Heimberg, 2007).

Self-Efficacy and Procrastination: Previous studies emphasize that self-efficacy plays an important role in understanding procrastination (Bandura et al., 1977; Tuckman, 1990). It involves both the evaluation of one's abilities and the motivation to carry out tasks despite challenges (Bandura, 1997; Voica, Singer & Emil, 2020), shaping confidence in handling difficulties (Sari & Fakhruddiana, 2019). Individuals with low self-efficacy are more likely to experience stress, poor self-control, and negative beliefs about their abilities, which contribute to procrastination (Balkis & Dura, 2007). Research also shows that negative beliefs and avoidance-oriented goals are positively related to procrastination, while positive beliefs and approach-oriented goals are negatively related (Howell & Buro, 2009). Additionally, higher social support can enhance self-efficacy and reduce procrastination (Zhang Guo, Ren, Ma, Chen & Chen 2024). Overall, multiple studies and a meta-analysis confirm that self-efficacy is significantly and negatively associated with procrastination, acting as a strong predictor of lower procrastination levels (Kurtovic, Vrdoljak, & Idzanovic, 2019; Waschle, Allgaier, Lachner, Fink & Nuckles, 2014). Similarly, Zhang et al., (2024) found that greater social support is associated with higher self-efficacy, which in turn reduces procrastination. Previous research consistently shows a negative relationship between self-efficacy and procrastination (Kurtovic, et al., 2019; Steel, 2007; Waschle et al., 2014). A meta-analysis of 39 studies further confirmed that self-efficacy is significantly linked to procrastination (Steel, 2007), and it has been identified as a strong negative predictor of procrastination (Kurtovic, et. al., 2019; Waschle, et al., 2014).

Emotion regulation and Procrastination: A growing body of research highlights a strong connection between procrastination, emotions (affect), and emotion regulation. Individuals who experience more positive emotions are less likely to procrastinate (Kuhnel, Bledow & Kuonath, 2023), whereas negative emotions often lead individuals to delay tasks as a way to temporarily avoid discomfort (Sirois & Pychyl, 2013). Tasks perceived as difficult or unpleasant can trigger negative feelings, prompting avoidance and procrastination (Solomon & Rothblum, 1984). This behavior is often linked to poor emotion regulation and failures in self-regulation (Fernie, McKenzie, Nikcevi, Caselli & Spada, 2016; Steel & Klingsieck, 2016), providing short-term emotional relief (Golestanibakht & Shokri, 1992). Procrastination is also associated with emotions such as shame and guilt (Fee &

Tangney, 2000; Pychyl et al., 2000) and is a predictor of depression, anxiety, and stress (Gadosey, Schnettler, Scheunemann, Baulke, Thies, Dresel & Grunschel, 2024; Johansson, Rozental, Edlund, Côté, Sundberg, Onell & Skillgate, 2023). Effective emotion regulation plays a key role in reducing academic procrastination (Guo & Lee, 2022), while difficulties in managing emotions contribute to increased procrastination (Sirois & Pychyl, 2013). Studies show a negative relationship between procrastination and both emotion regulation and mindfulness (Jobaneh, Mousavi, Zanipoor, Seddigh & Alsadat, 2016) and suggest that improving emotion regulation skills can help reduce procrastination (Eckert, Ebert, Lehr, Sieland & Berking, 2016). Overall, procrastination is widely viewed as a result of poor self-regulation and maladaptive emotion regulation strategies (Pychyl & Sirois, 2016), with higher levels linked to greater emotional difficulties and distress (Bytamar, Saed & Khakpoor, 2020; Bytamar Saed & Khakpoor 2020; Gonzalez, Rovella, Andrea & Gonzalez, 2023).

Rational of the Study: High Self-efficacy and better emotion regulation both are the personal construct which assist people to complete the task successfully. Several studies have demonstrated that self-efficacy is significantly correlated with procrastination; identified as a negative predictor (Kurtovic, et al., 2019; Steel, 2007; Waschle, et al., 2014). This relationship has been also verified in education psychology, by Klassen et al. (2008), who showed that academic self-efficacy, particularly the belief in one's ability to self-regulate, was one of the strongest predictors of procrastination among undergraduates. In relation to emotion regulation, many previous studies found it as a predisposing and perpetuating factor in understanding procrastination (Sirois and Pychyl, 2013; Pychyl and Sirois, 2016); as a potential predictor of procrastination (Fernie, et al., 2016; Golestanibakht & Shokri, 1992 ; Kuhnel, Bledow & Kuonath, 2023; Sirois & Pychyl, 2013 & Steel and Klingsieck, 2016) Students, who lack ability to plan, monitor and control their learning behaviours are more likely to procrastinate (Wolters, 2003) and raining of emotion regulation skills could reduce procrastination (Eckert et al., 2016).

To keep this review in mind it can be concluded that self-efficacy refers to your belief in your ability to complete a task. It simply means that “Can I do this?” When a person doubts his/her ability, task feels overwhelming and he/she delays it. Contrary, when he/she feels capable, more likely to start and persist the task. On the other side, emotional regulation is your ability to manage/modify and regulate the intensity of your emotions to achieve your desired goals. It means “How does a person handle discomfort?” When a person can't regulate negative emotions, it triggers stress or discomfort and he/she start to avoid them to feel better temporary.

Therefore, an important aim of the current study was to examine the role of Self-Efficacy and Emotion Regulation in Procrastination behavior among college students. Moreover, based on the existing research evidence, it was inferred that both the psychological determinants would play a significant role in Procrastination behavior among college students.

Research Problem: “Psychological Determinants of Procrastination: The Role of Self-Efficacy and Emotion Regulation among college students.”

Objective: The following objectives were formulated.

1. To explore the relationship of self-efficacy & emotion regulation with academic procrastination among college students.
2. To examine the role of self-efficacy & emotion regulation in academic procrastination among college students.

Hypothesis:

1. There would be significant relationship of self-efficacy & emotion regulation with academic procrastination among college students.
2. There would be significant role of self-efficacy & emotion regulation in academic procrastination among college students.

Methodology

Research design: A Correlational design was used to examine the role of self-efficacy and emotion regulation as psychological determinants of academic procrastination among college students

Sample: The sample consisted of 100 college students including both the gender (50 males and 50 females) from Haryana. The age range of participants was 18-25 years (Mean age= 21.7 years, SD 5.00). The sample was selected on the basis of availability.

Tools: To achieve the objectives of the study following tools were used in the present study.

- **College Academic Self-Efficacy Scale (CASES) developed by Owen & Froman, (1988)** is a 33-item self-report measure designed to measure academic self-efficacy, to rate how confident they feel regarding their abilities to perform common academic-related behaviors in college (Owen & Froman, 1988). The questionnaire uses a 5-point Likert-type scale with a range of A (or 5 = Quite a lot of confidence), B (or 4 = A lot of confidence), C (or 3 = neutral), D (or 2 = A little confidence) and E (or 1 = very little confidence). Higher score reflects higher academic self-efficacy of the students. Owen & Froman (1988) examined the test-retest reliability and alpha coefficients were .90 and .92, respectively of the CASES.
- **Emotion Regulation Questionnaire (ERQ) developed by Gross & John (2003):** A 10-item scale designed to measure respondents' tendency to regulate their emotions in two ways: (1) Cognitive Reappraisal and (2) Expressive Suppression. Respondents answer each item on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Items 1, 3, 5, 7, 8, 10 make up the Cognitive Reappraisal facet and Items 2, 4, 6, 9 make up the Expressive Suppression facet. Higher scores on both the strategies shows higher degree of that particular strategy. Alpha reliabilities averaged .79 for Reappraisal and .73 for Suppression. Test-retest reliability across 3 months was .69 for both scale (Gross & John, 2003).

- **Tuckman Procrastination Scale (TPS)** developed by Tuckman (1991) is a 16 items self-report measure responders' procrastination and to identify students with academic problems early in their career. The TPS consists of 16 Likert scale items and one factor. Twelve items are scored directly and four items (16-17-14-12) are scored inversely. Higher scores reflect greater procrastination tendency. Tuckman (1991) found good reliability with Cronbach's alpha of 0.86.

Procedure: Participants were contacted in a face to face individual or in a group setting. After taking the consent of the subjects, they were explained the purpose of the study and then they were given questionnaires. When participants completed the questionnaires, after that, they were humbly thanked for their effort and cooperation.

Result and Discussion

The present empirical investigation entitled "Psychological determinants of procrastination: The role of self-efficacy and emotion regulation among college students." was conducted in order to examine the association between self-efficacy, emotion regulation and procrastination consisting a purposive sampling of 100 college students. Additionally, as researchers have mentioned in methodology, the entire correlational objective so correlational coefficient and stepwise multiple regression analysis were computed in present study.

Table 1.1

Descriptive statistics and correlation matrices explaining relationship academic self-efficacy, emotion regulation and academic procrastination

Variables	Mean	SD	Academic Self-efficacy	Cognitive reappraisal	Expressive Suppression	Academic procrastination
Academic Self-efficacy	143.91	14.68		.542**	-.458*	-.622**
Cognitive reappraisal	24.45	4.67			-.648**	-.412*
Expressive Suppression	16.22	3.09				.609**
Academic procrastination	34.78	7.36				

Table 1.1 shows the obtained values for mean and SD of college student on Academic Self-efficacy (M=143.91, SD=14.68), on two emotion regulation strategies e.g. Cognitive reappraisal (M=24.45, SD=4.67), expressive suppression (M=16.22, SD=3.09) and academic procrastination (M=34.78, SD=7.36).

The correlation matrix presented in Table 1.1 below shows significant relationships among Academic Self-efficacy, dimensions of emotion regulation e.g. cognitive reappraisal & expressive suppression and academic procrastination. Result table 1.1 shows that academic self-efficacy and cognitive reappraisal negatively correlated with academic procrastination ($r = -.622$, $p < 0.01$), ($r = -.412$, $p < 0.05$) respectively, while on the other side, expressive suppression is positively correlated ($r = .609$, $p < 0.01$) with academic procrastination among college students.

Table 1.2

Predictors of Academic Procrastination

Predictors Variables	R	R ²	ΔR^2	B	F	Sig
Academic self-efficacy	.339	0.132	0.132	-0.162	45.461	.001
Expressive Suppression	.387	0.168	0.036	0.131	30.609	.001

As presented in Table 1.2, Academic Procrastination behaviour was found to be significantly predicted by two variables: Academic self-efficacy and expressive suppression. Collectively, these predictors explained 16.8% of the variance in academic procrastination, with an R² value of 0.168. The detailed findings for each predictor are outlined below.

Academic self-efficacy emerged as the strongest predictor, entering the regression model at Step 1. The multiple R value at this stage was 0.339, with R² value of 0.132 (F= 45.461, p<0.01) and an R² change of 0.132, indicating that academic self-efficacy alone accounted for 13.2% of the variance in academic procrastination behaviour. The regression coefficient ($\beta = -0.162$) was negative, suggesting that higher levels of academic self-efficacy are negatively associated with academic procrastination behaviour.

Expressive Suppression was identified as the second significant predictor, entering the model at Step 2. At this stage, the multiple R value increased to 0.387, with an R² value of 0.168 (F =30.609, p<0.01) and an R² change of 0.036, indicating that this variable uniquely accounted for 3.6% of the variance in academic procrastination behaviour. The regression coefficient ($\beta = 0.131$) was positive, reflecting a positive relationship between Expressive Suppression and academic procrastination behaviour.

Discussion: The correlation results indicate that academic self-efficacy has a negative relationship with academic procrastination. Result Table 1.2, further shows that academic self-efficacy significantly predicts procrastination behavior among college students. In other words, students who have higher academic self-efficacy tend to procrastinate less. This suggests that when students feel confident in their academic abilities, they are more likely to begin and complete their tasks on time. Among college students, higher academic self-efficacy leads to lower procrastination means they are better able to handle challenges, stay focused on their work, and maintain commitment to completing assignments, which reduces their tendency to engage in procrastination. The findings of this study are consistent with Bandura's social cognitive theory (1997), which emphasizes that self-efficacy shapes an individual's choices, level of effort, persistence, and ability to cope with challenges. In a similar vein, Tuckman (1991) observed that students with higher self-efficacy tend to procrastinate less, as they are more effective in starting and completing tasks. Likewise, Steel (2007), through a meta-analysis, identified self-efficacy as a strong negative predictor of procrastination, indicating that individuals with low confidence in their abilities are more likely to delay tasks due to fear of failure or unsatisfactory performance. Self-efficacy also plays an important role in self-regulated learning, which

helps reduce procrastination. Students with strong academic self-efficacy are more likely to use strategies such as setting goals, managing their time effectively, and monitoring their own progress. These behaviors help them organize their workload and stay on track, reducing the chances of delaying tasks until the last moment (Klassen et al., 2008; Wolters, 2003). On the other hand, low self-efficacy has been identified as one of the key factors contributing to procrastination (Meitasari, Maba, Rahmawati, & Basith, 2020).

Next, Cognitive reappraisal (CR), an adaptive form of emotion regulation that involves changing the way one interprets emotionally charged situations, was also found to be negatively related to academic procrastination (AP) among college students. This suggests that students who are able to reframe situations to reduce their emotional impact are less likely to delay their academic tasks or rely on last-minute efforts. These results are consistent with the work of James Gross (1998), who described cognitive reappraisal as an effective strategy for managing negative emotions. The inverse relationship between CR and AP indicates that students who regularly use this approach are better equipped to handle feelings such as anxiety, stress, and fear of failure linked to academic work. As a result, they are less likely to avoid tasks and more likely to begin and complete them on time. Further support comes from Sirois and Pychyl (2013), who argued that procrastination is closely tied to difficulties in regulating emotions. Students who can reinterpret challenging academic situations for example, by viewing assignments as opportunities for growth rather than as threats are less inclined to postpone their work. In a similar way, Wolters (2003) found that adaptive self-regulation strategies, including cognitive reframing, are associated with reduced levels of procrastination.

In contrast, as shown in Table 1.1 expressive suppression (ES) a maladaptive emotion regulation strategy that involves inhibit and suppress emotional expressions was found to have a significant positive relationship with academic procrastination (AP). Result Table 1.2, further shows that academic procrastination behavior was significantly predicted by expressive suppression among college students. This indicates that college students who rely on suppressing their emotions are more likely to delay their academic work. Such students often submit assignments late or complete them hastily despite being aware of the consequences. They may struggle with planning and organizing their study schedules, show weaker self-regulation, and tend to avoid tasks they perceive as difficult, uninteresting, or stressful. One possible explanation for the positive link between expressive suppression and procrastination is that suppressing emotions places an additional burden on cognitive resources. When students use mental effort to control their emotional expressions, fewer resources remain available for focusing on tasks and regulating behavior. This added strain can reduce concentration and motivation, increasing the likelihood of delaying work. These findings are supported by Gross (1998), who noted that individuals who habitually suppress their emotions may continue to experience negative feelings such as anxiety, stress, and frustration, even while attempting to hide them. Research evidence aligns with this explanation. Richards and Gross (2000) found that expressive suppression is associated with higher physiological stress and poorer cognitive performance, both of which can make it harder to begin and sustain academic tasks. Similarly, Sirois

and Pychyl (2013) described procrastination as a maladaptive way of managing emotions, where individuals postpone tasks to temporarily reduce negative feelings. Steel (2007) also highlighted emotional factors and difficulties in self-regulation as important contributors to procrastination. Because expressive suppression does not effectively reduce negative emotions—and may even intensify them, it can lead students into a cycle of stress and avoidance, ultimately increasing procrastination.

Implications of the study: The study highlights the role of self-efficacy in minimizing procrastination. When students have confidence in their academic abilities, they are more likely to begin tasks promptly and continue working even when challenges arise. This suggests that teachers should focus on building confidence through methods such as setting clear goals, offering encouragement, and providing structured guidance. In addition, the findings draw attention to the importance of emotion regulation. Students who are able to handle stress, anxiety, and frustration effectively are less likely to put off their academic responsibilities. This creates a need for integrating emotional skill development into education, including practices like mindfulness, stress control techniques, and healthy coping methods. Furthermore, the study indicates that procrastination is not merely a result of poor time management but is strongly linked to underlying psychological factors. Therefore, efforts to address procrastination should extend beyond simple scheduling strategies and instead focus on students' thoughts, feelings, and coping styles, with support from counselling services and student assistance programs.

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